

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/22/97
Date Received: 08/19/97
Project: Metro Grab M58177
Date Extracted: 08/19/97
Date Analyzed: 08/20/97

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL METALS BY
INDUCTIVELY COUPLED PLASMA (ICP)
(METHOD 6010)**

Results Reported as mg/L (ppm)

<u>Sample ID</u>	M58177	Method Blank
Analyte:		
Chromium	0.54	<0.05
Copper	0.57	<0.05
Nickel	0.62	<0.05
Zinc	<0.05	<0.05

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QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 708052-01 (Duplicate)

Analyte:	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.20	0.23	14	0-20
Copper	mg/L (ppm)	0.48	0.51	6	0-20
Nickel	mg/L (ppm)	0.39	0.41	5	0-20
Zinc	mg/L (ppm)	0.06	0.07	15	0-20

Laboratory Code: 708052-01 (Matrix Spike)

Analyte:	Reporting Units	Spike Level	Sample Result	% Recovery		Acceptance Criteria	Relative Percent Difference
				MS	MSD		
Chromium	mg/L (ppm)	5	0.20	88	87	80-120	1
Copper	mg/L (ppm)	5	0.48	91	90	80-120	1
Nickel	mg/L (ppm)	10	0.39	91	89	80-120	2
Zinc	mg/L (ppm)	5	0.06	89	88	80-120	1

Laboratory Code: Spike Blank

Analyte:	Reporting Units	Spike Level	% Recovery		Acceptance Criteria	Relative Percent Difference
			MS	MSD		
Chromium	mg/L (ppm)	5	97	98	80-120	1
Copper	mg/L (ppm)	5	98	99	80-120	1
Nickel	mg/L (ppm)	10	102	103	80-120	1
Zinc	mg/L (ppm)	5	99	99	80-120	0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Jensen, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

August 22, 1997

Gerald Thompson
Alaskan Copper Works
628 Hanford Street
Seattle, WA 98134

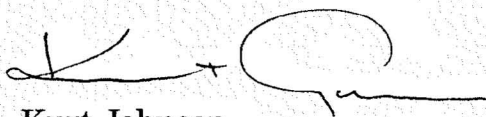
Dear Mr. Thompson:

Included are the results from the testing of material submitted on August 19, 1997 from your Metro Grab M58177 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

A handwritten signature in black ink, appearing to read 'Kurt Johnson', with a stylized flourish at the end.

Kurt Johnson
Chemist

Enclosures

ACU0822R.DOC

FRIEDMAN & BRUYA, INC.

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August 22, 1997

DUPLICATE COPY

INVOICE # 97NAA0822-2

Accounts Payable
Alaskan Copper Works
628 Hanford Street
Seattle, WA 98134

**RE: Project Metro Grab M58177: Results of testing requested by Gerald Thompson
for material submitted on August 19, 1997.**

1 sample analyzed for total metals by ICP Method 6010/3005 @ \$65 per sample	<u>\$ 65.00</u>
Amount Due	\$ 65.00

FEDERAL TAX ID # (b) (6)